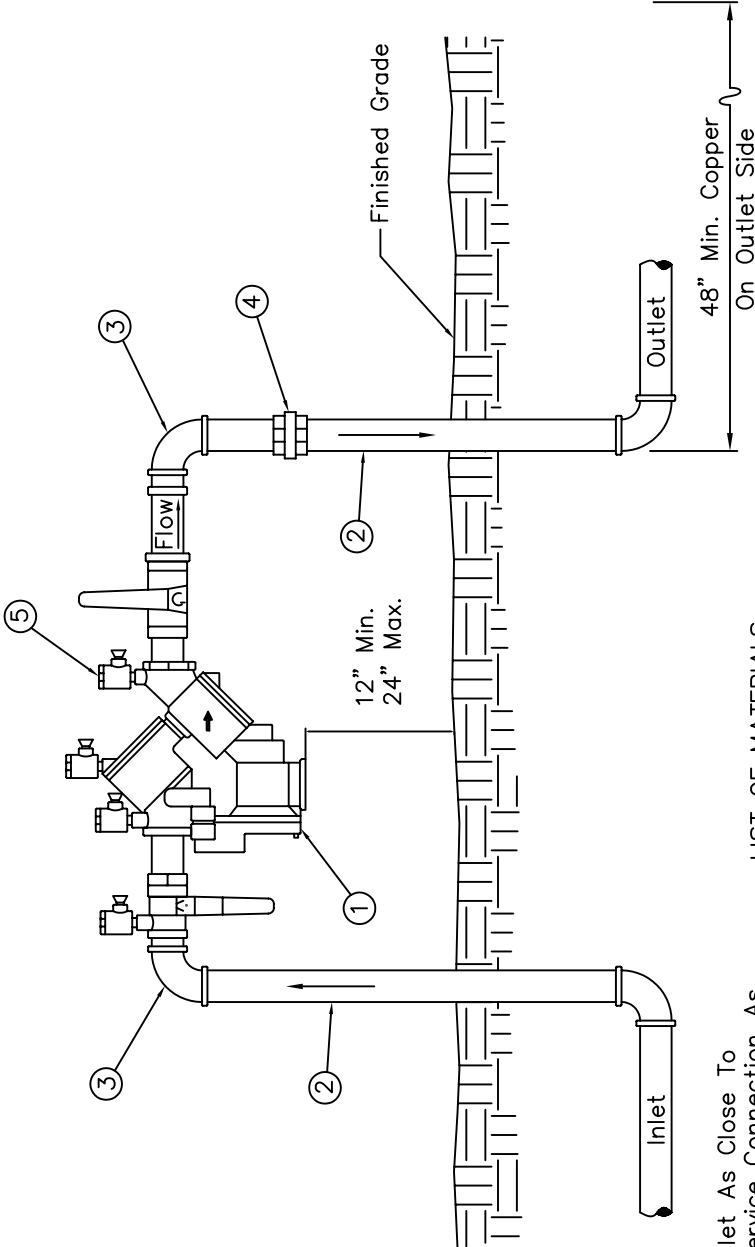


GENERAL NOTES

1. Contact the City Of Scottsdale Water And Wastewater Operations, Backflow Prevention 312-5668, for latest list of approved back-flow prevention assemblies or certified testers.
2. Backflow preventers must be tested by a certified tester before final approval is issued.
3. Copper fittings shall be connected with lead free solder joints.
4. Finished grade underneath the backflow preventer shall be at 95% compaction.
5. All nipples to be copper or brass.
6. Piping under the City right of way must be type "K" copper.
7. Call for underground inspection before backfilling trench.

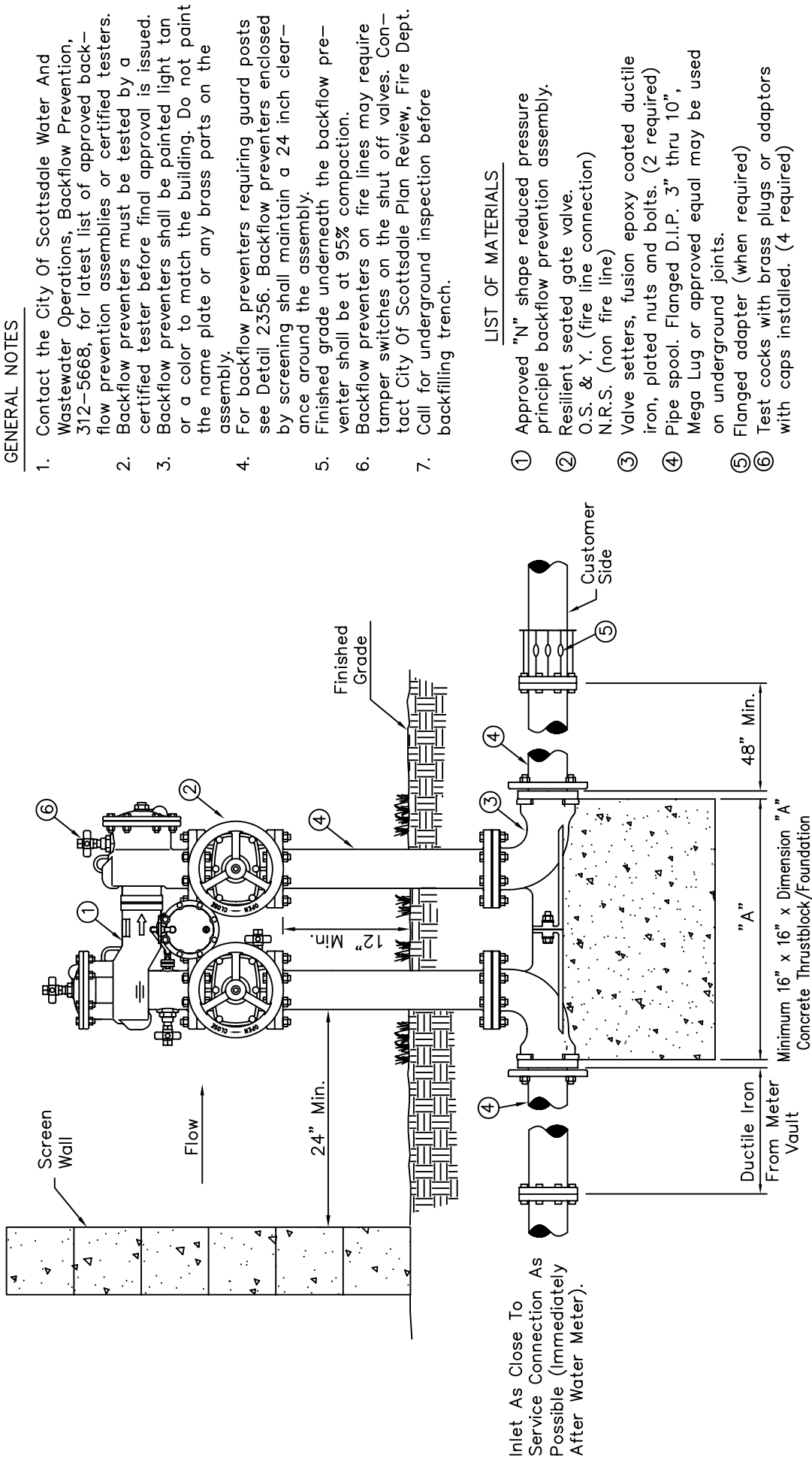


Inlet As Close To Service Connection As Possible (Immediately After Water Meter). Copper On Inlet Side.

LIST OF MATERIALS

- ① Approved reduced pressure principle backflow prevention assembly, ball valves included.
- ② Pipe spool, type "L" hard copper, 3/4" thru 2 1/2".
- ③ 90° ell, copper, 3/4" thru 2 1/2".
- ④ Pipe union, brass or copper.
- ⑤ Test cocks with brass plugs or adaptors with caps installed. (4 Required)

DETAIL NO. 2354	City of Scottsdale Standard Details	APPROVED BY: _____	REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY FOR ASSEMBLIES 3/4 INCH THRU 2 1/2 INCHES	DETAIL NO. 2354
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WINDING STAIRS

UNIFORM BUILDING CODE 1003.3.3.8.2

THE FOLLOWING DETAIL IS FOR THE INSTALLATION
OF WINDING STAIRS IN RESIDENTIAL SINGLE FAMILY (R3),
DUPLEX (R3), AND THE INTERIOR OF INDIVIDUAL DWELLING
UNITS OF MULTIFAMILY BUILDINGS (R1).

NOTE THE FOLLOWING ARE REQUIRED:

MINIMUM 36" CLEAR STAIR WIDTH

A HANDRAIL IN ACCORDANCE WITH UBC 1003.3.3.6

A GUARDRAIL IN ACCORDANCE WITH UBC 509

TREADS:

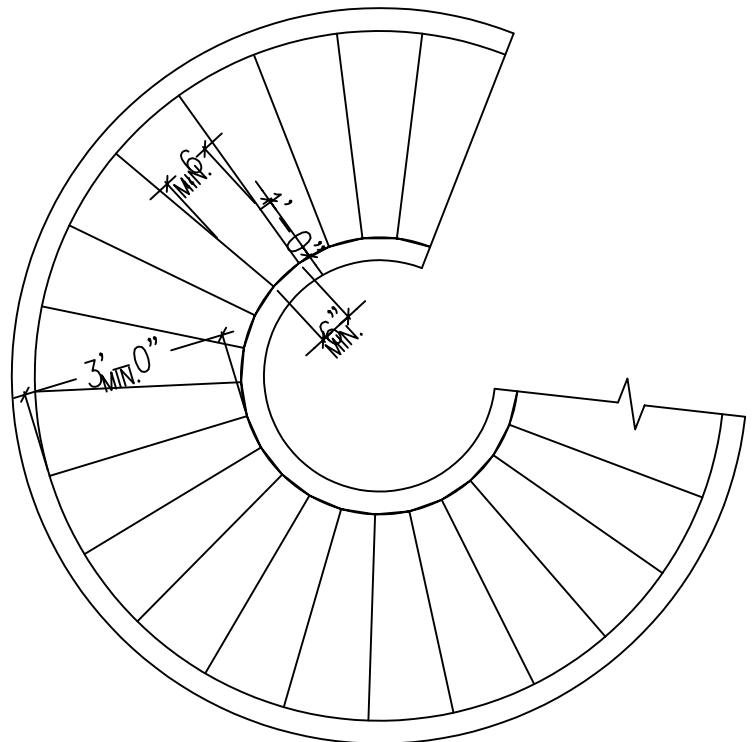
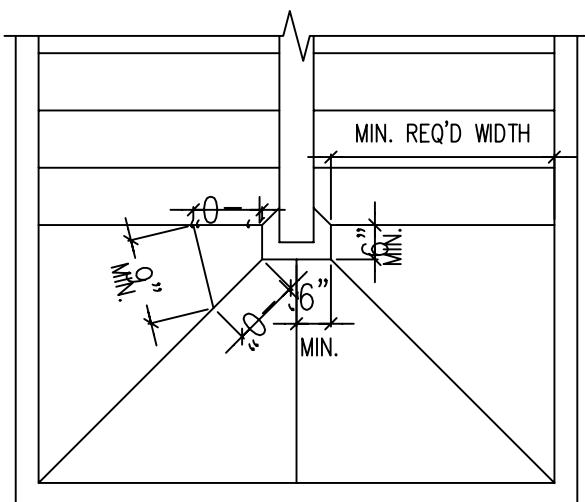
MIN. 6" RUN AT NARROWEST SIDE

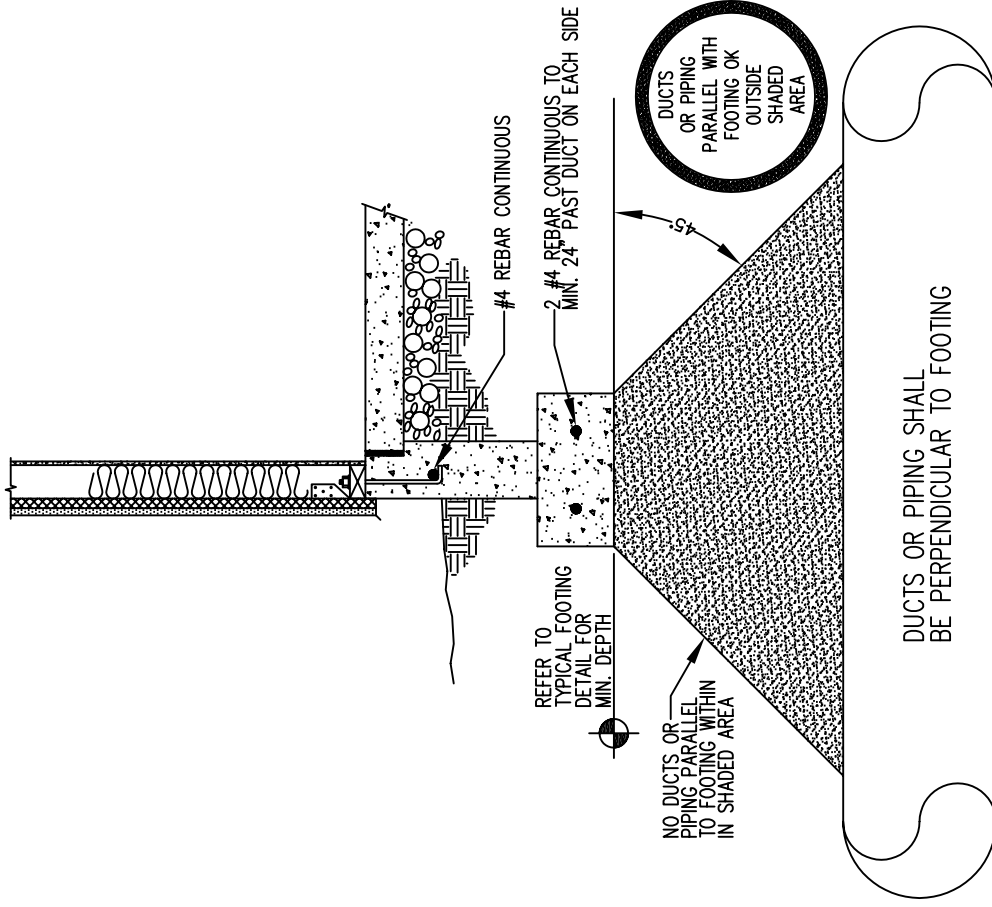
MIN. 9" RUN 12' FROM NARROWEST SIDE

RISERS:

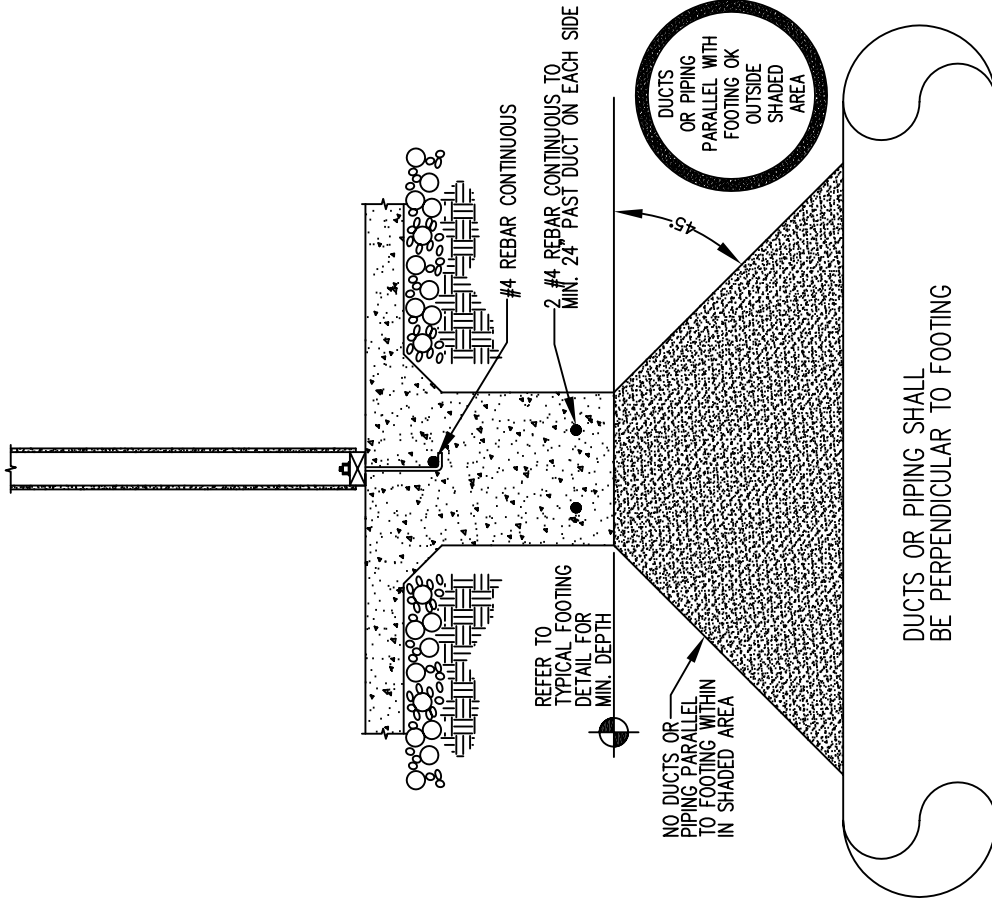
MIN. 4"

MAX 8"





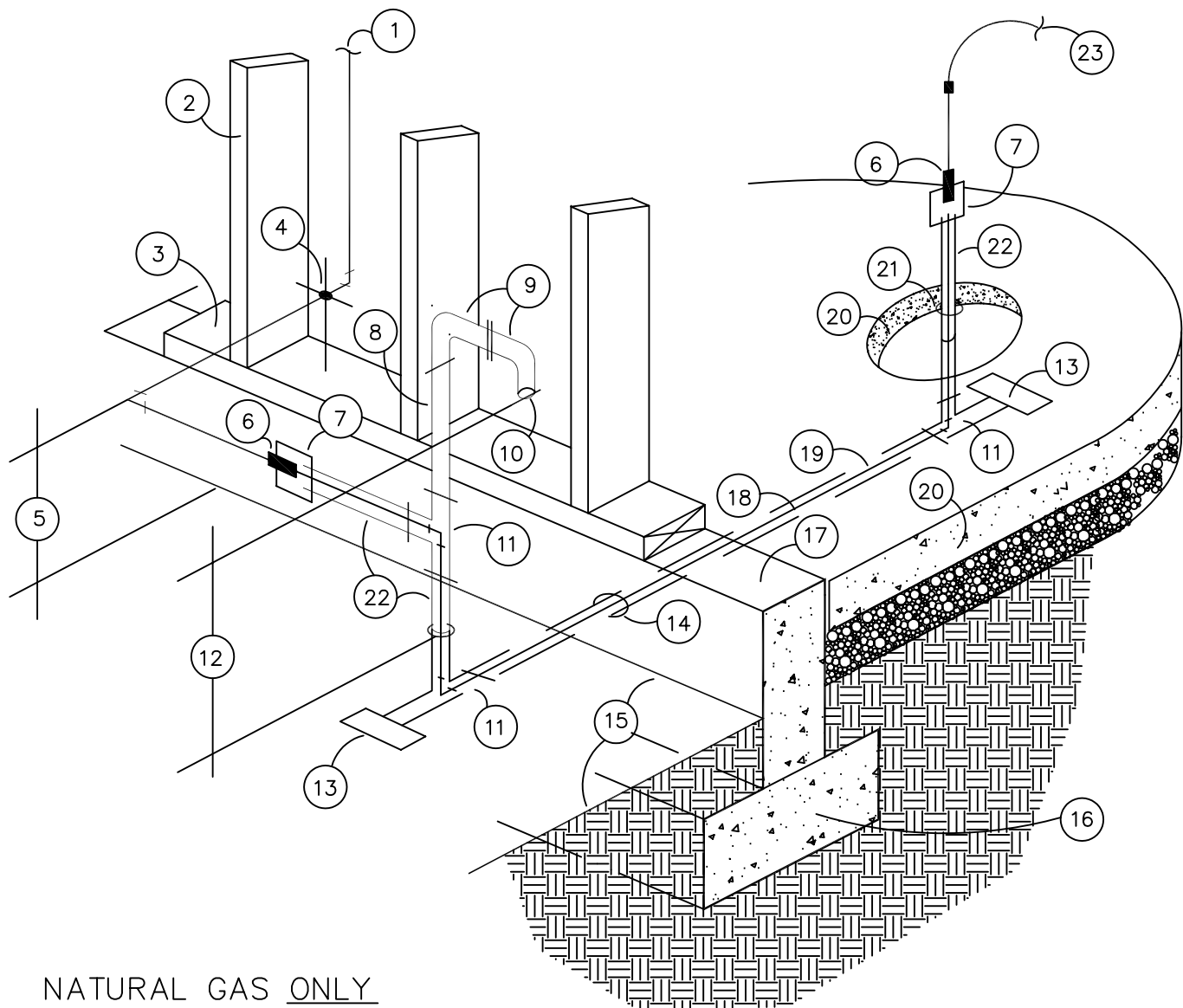
DUCT OR PIPING BELOW EXTERIOR FOOTING



DUCT OR PIPING BELOW INTERIOR FOOTING

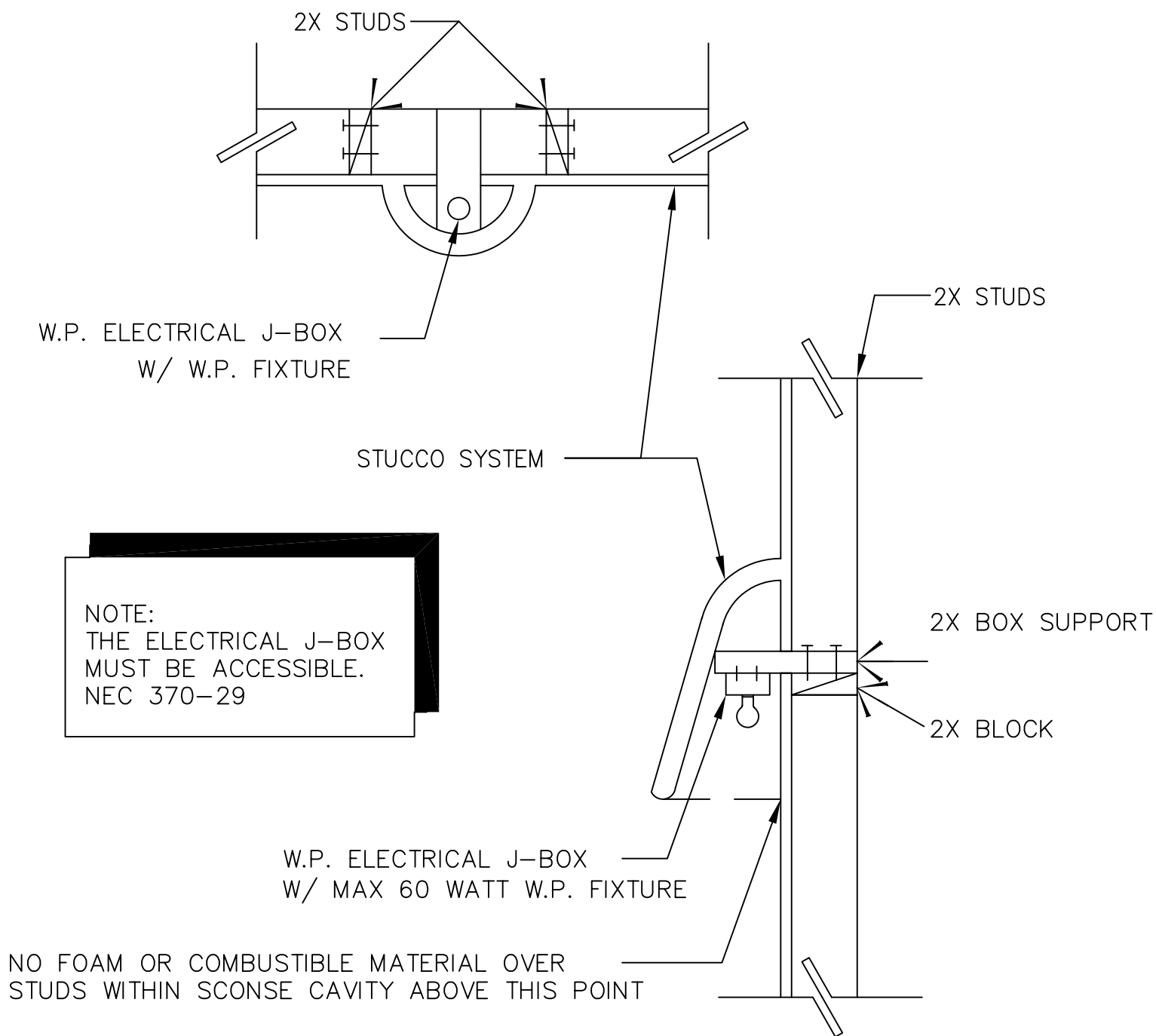
RESIDENTIAL KITCHEN ISLAND COOKING COUNTER

UNDERSLAB VENTED GAS PIPING SLEEVE INSTALLATION.



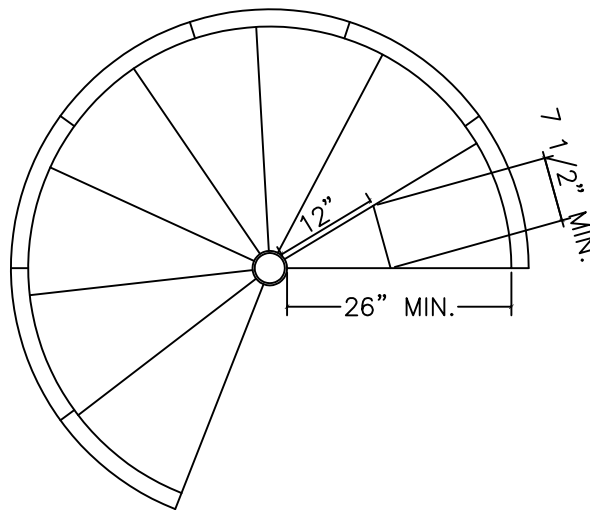
NATURAL GAS ONLY

1. GAS PIPING IN EXTERIOR WALL CAVITY FROM ATTIC SPACE
2. EXTERIOR WALL STUDS
3. TREATED BASE PLATE
4. CAULK GAS PIPE PENETRATION THROUGH EXTERIOR WALL FINISH MATERIAL.
5. 8" MINIMUM HEIGHT FROM FINISH GRADE TO THE EXTERIOR WALL PENETRATION.
6. STEEL WELL CASING ADAPTER. WELD BOTH ENDS OF ADAPTER TO GAS PIPING. OMIT WITH SMALLER BAND-SEAL COUPLINGS.
7. PLASTIC TO STEEL BAND-SEAL COUPLING.
8. PLASTIC (SCHD.40 MIN.) VENT PIPING (1" MINIMUM VENT OPENING)
9. PLASTIC 90 DEGREE ELBOW.
10. OPEN VENT.
11. PLASTIC "T" COUPLING
12. 18" MINIMUM HEIGHT FROM FINISH GRADE TO VENT OPENING.
13. PLASTIC ENDCAP OR PLUG.
14. CAULK PLASTIC SLEEVE PENETRATION THROUGH CONCRETE STEM WALL.
15. FINISH GRADE
16. CONCRETE FOOTING
17. CONCRETE STEM WALL
18. GAS PIPING SLEEVED UNDER SLAB TO KITCHEN COOK ISLAND.
19. PLASTIC (SCHD.40 MIN.) VENT SLEEVE UNDER SLAB TO KITCHEN COOK ISLAND MIN. TWO PIPE SIZE LARGER THAN GAS PIPING.
20. CONCRETE FLOOR SLAB.
21. CAULK PLASTIC SLEEVE PENETRATION THROUGH CONCRETE FLOOR SLAB.
22. PLASTIC (SCHD.40 MIN.) VENT SLEEVE MIN. TWO PIPE SIZE LARGER THAN GAS PIPING.
23. ACCESSIBLE CONNECTION TO KITCHEN ISLAND COOKING APPLIANCE(S)



STUCCO SCONCE

NOT TO SCALE



1997 Uniform Building Code, Section 1003.3.3.8.3

Spiral Stairways(Summary):

- 1.) The area served by the stairway shall be limited to 400 square feet when used as the required means of egress.
- 2.) The stair stringers or supports shall be designed for a uniform load of 100 pounds per square foot.
- 3.) Individual stair treads shall be designed to support a 300 pound load at the point of maximum stress.
- 4.) The treads shall provide a clear walking area of 26 inches.
- 5.) A minimum 7-1/2" run shall be provided at 12" from the end of the narrowest portion of tread.
- 6.) A minimum 6'-6" clear headroom shall be provided.
- 7.) The maximum riser shall be 9-1/2". Max. 4" openings.
- 8.) A guardrail (UBC 509) and handrail (UBC 1003.3.3.6) are required.

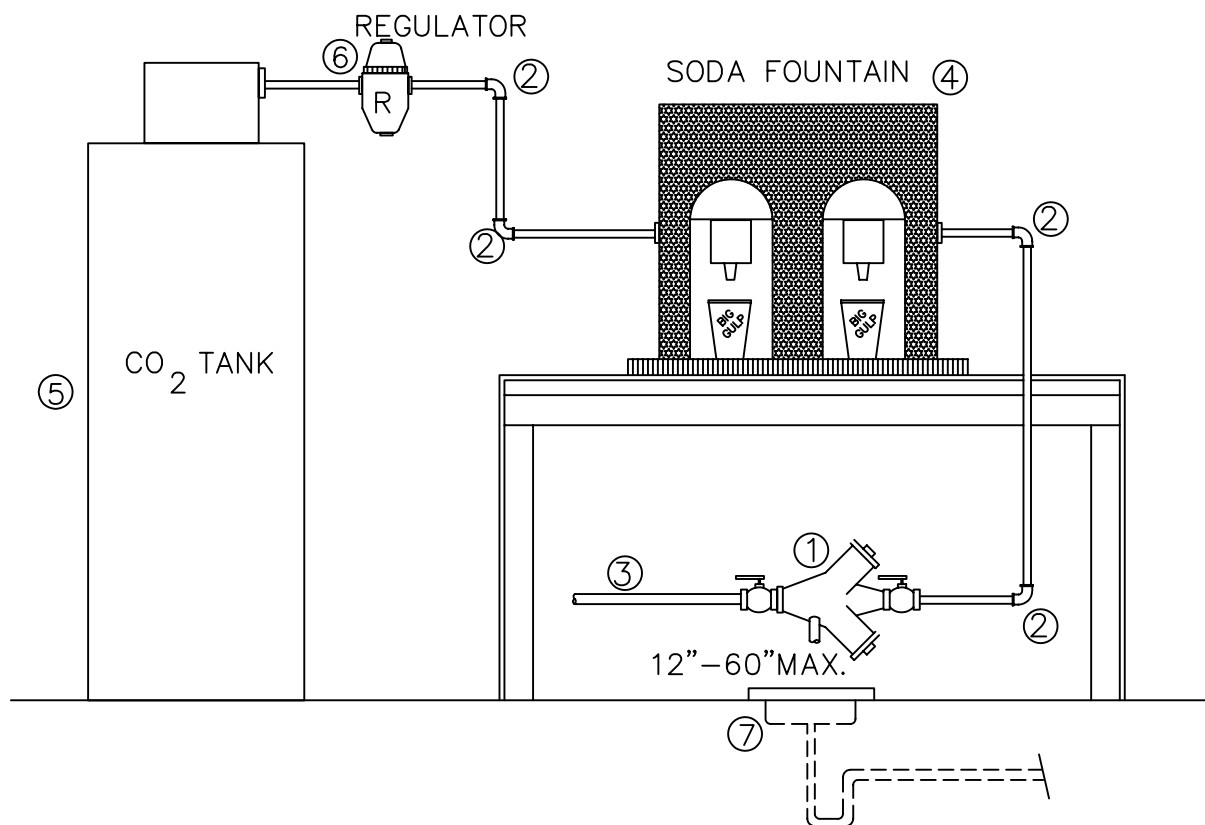
GENERAL NOTES.

- Ⓐ BACKFLOW PREVENTION ASSEMBLY MUST BE TESTED FOR PROPER OPERATION BY CERTIFIED TESTER BEFORE A FINAL APPROVAL WILL BE ISSUED.
- Ⓑ COPPER FITTINGS SHALL BE CONNECTED WITH LEAD FREE SOLDER JOINTS OR COMPRESSION FITTINGS MAY BE USED.

LIST OF MATERIALS

- ① APPROVED STAINLESS STEEL, REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY INSTALLED WITH ADEQUATE DRAINAGE FOR RELIEF VALVE FUNCTION.
- ② DOWNSTREAM PIPING TO BE APPROVED PLASTIC OR SSTEEL.
- ③ INLET PIPING TO BE POTABLE WATER PIPING AS DEFINED IN THE UNIFORM PLUMBING CODE.
- ④ LISTED AND APPROVED CARBONATED DRINK DISPENSING UNIT.
- ⑤ LISTED AND APPROVED CARBON DIOXIDE TANK
- ⑥ LISTED AND APPROVED REGULATOR FOR CARBON DIOXIDE GAS.
- ⑦ FLOOR DRAIN OR ADEQUATE MEANS OF DRAINAGE FOR RELIEF VALVE ON BACKFLOW PREVENTION ASSEMBLY.

SUGGESTED INSTALLATION FOR COMPLIANCE WITH CURRENT UNIFORM PLUMBING CODE.



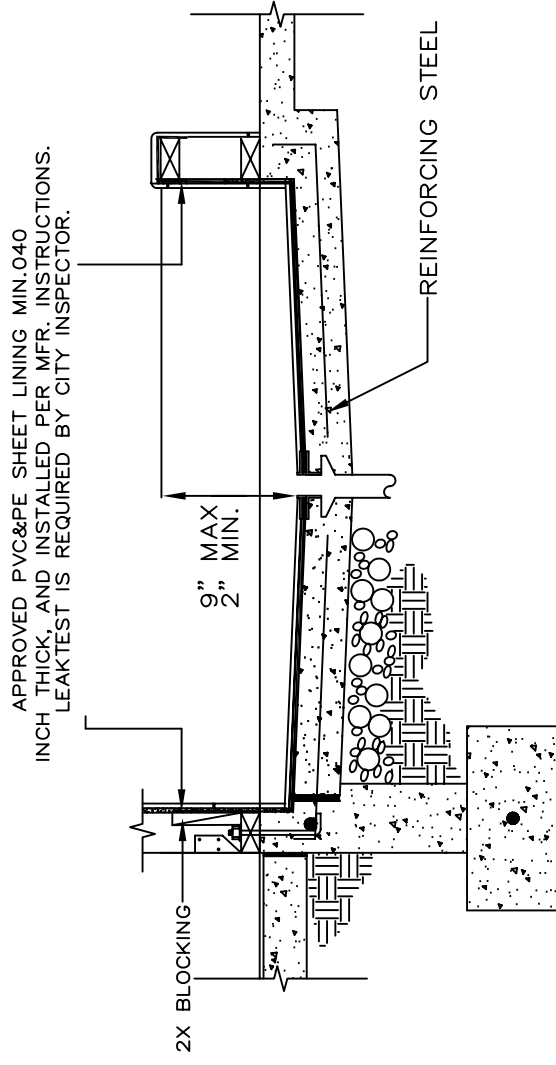
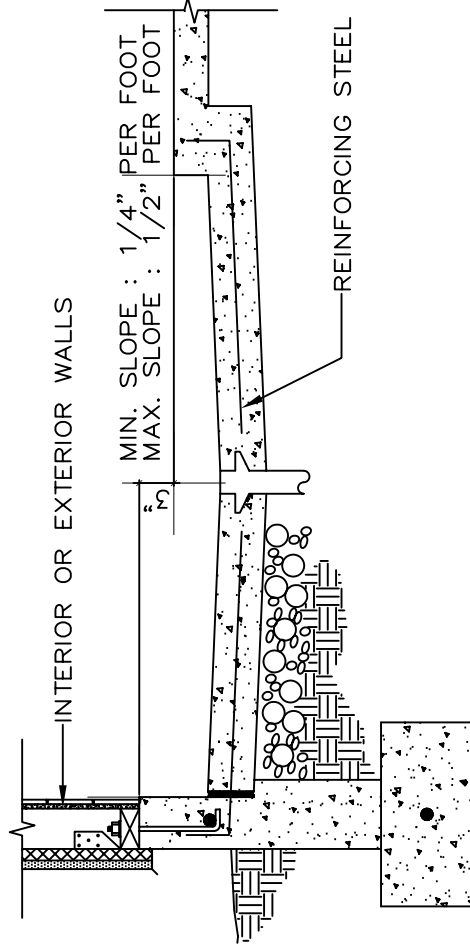
REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY FOR WATER SUPPLY TO CARBONATED DRINK DISPENSING MACHINE.

SHOWER RECEPTORS BUILT DIRECTLY ON GROUND SHALL:

- A) BE WATERTIGHT.
- B) BE CONSTRUCTED OF APPROVED TYPE DENSE. NON-ABSORBENT AND NON-CORROSIVE MATERIALS.
- C) BE ADEQUATELY REINFORCED.
- D) BE PROVIDED WITH AN APPROVED FLANGED FLOOR DRAIN MADE OF CAST IRON, BRASS OR OTHER APPROVED MATERIAL DESIGNED TO MAKE WATERTIGHT JOINT IN FLOOR.
- E) HAVE SMOOTH, IMPERVIOUS AND DURABLE SURFACES.
- F) HAVE CURBS EXTENDING AT LEAST (3) INCHES ABOVE THE FINISHED TRESHOLD BEFORE ANY WOOD SUPERSTRUCTURE MAY BE ADDED.

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SHOWER BASE WITH CURB
1" = 1'-0"

SHOWER BASE WITH MEMBRANE
1" = 1'-0"

CITY OF SCOTSDALE NOTES

(The following notes shall be incorporated into the plans. If these notes are reproduced on the plans as a block, it will facilitate the review of the project.)

1. Governing Building Codes (Sec. 106.3.3 as Amd.): All construction shall comply with the following codes and amendments per their adopting ordinances:
 1997 Uniform Building Code (Ord. #3096)
 1997 Uniform Mechanical Code (Ord. #3097) (ICBO Ed.)
 1994 Uniform Plumbing Code(Ord. #2785) (APMO Edition)
 1997 Uniform Fire Code (Ord. #3100)
 1999 National Electrical Code (Ord. #3413)
 Design and construct to meet requirements of Seismic Zone 2B Zone Factor, Z = 0.075 (Sec. 1629.4.1 as amd.).
2. 70mph windspeed, exposure C.
3. All products listed by I.C.B.O./N.E.R. number(s) shall be installed per the report and manufacturer's written instructions. Product substitution(s) for product(s) listed shall also have I.C.B.O. approved evaluation report(s) or be approved.
4. Foundations supporting wood shall extend at least 6" above adjacent finish grade (Sec. 1806.1).
5. Provide fire sprinkler system. (Sec. 904.2.2 as Amd. and U.F.C. Sec. 1003.2.1 Amd.).
6. Miscellaneous site structures, pools, spas, fences, site walls, retaining walls, and gas storage tanks require separate permits.
7. Minimum one required exit for an occupant load of less than 10.
8. Guest houses/suites/casitas require (Sec. 310.4 and Sec. 1003.3.1.8):
 a) All exits to be operable from the inside without use of a key or special knowledge.
 b) Manually operated edge or surface-mounted flush bolts and surface bolts are prohibited at a door or the active leaf of a pair of doors.
9. Doors leading into house from garage shall be self-closing and tight-fitting with gaskets and sweep (Sec. 302.4 Amd.).
10. Exterior wall penetrations by pipes, ducts or conduits shall be caulked. UBC Section 1402.1
11. Minimum insulation shall be: Ext. walls R-11, ceilings R-26. City of Scottsdale amendment - (Sec. 1302 Amd.).
12. Lumber shall bear an approved grading stamp (Sec. 2304.1 Amd.).
13. Fire blocking shall comply with UBC Section 708.2 and be maximum 10 ft. O.C., horizontal or vertical.
14. Floor-ceiling assemblies with a concealed space in excess of 1000 square feet shall have draft stops installed that divide the concealed space into approximately equal areas. UBC Section 708.3.1.1.1. Draft-stopping material shall comply with UBC Section 708.3.1.3.
15. Walls and soffits of enclosed usable space under interior stairways shall be protected on the enclosed side by minimum 5/8" type "X" gypsum board. UBC Section 1003.3.3.9.
16. Exterior locations shall not use gypsum wallboard on the ceiling unless there is 12 inches of protection by a beam or wall or a horizontal distance of 10 feet. UBC 224 and 2511.1. It is necessary to use an exterior material such as soffit board approved for the location.
17. Shower area walls shall be finished with a smooth, hard non-absorbent surface, such as ceramic tile, to a height of not less than 70 inches above the drain inlet. When gypsum wallboard is used as a base for tile or wall panels, water-resistant gypsum wallboard shall be used. Water-resistant gypsum board shall not be used over a vapor retarder, in areas of high humidity or on ceilings where the frame spacing exceeds 12 inches on center. UBC Section 807.1.3 and 2512.
18. Plumbing fixtures shall comply with the following conservation requirements: UPC 402. amd.
19. a) Water closets-Tank type = 1.6 gal./ flush.
 b) Shower heads- 2.75 gal./ minute.
 c) Faucets- 3.0 gal./ minute, provide aerator.
 d) Water treatment systems- equip with automatic shutoff to prevent continuous flow when not in use.
 e) Evap coolers shall have recirculating pumps.

Include the following notes on the Electrical Plans:

- a) Electrical ranges and clothes dryers shall be supplied by 4--wire (grounding) circuit conductors. NEC 250-140.
- b) Bathroom receptacle outlets shall be GFCI protected and supplied by at least one dedicated 20 ampere branch circuit that supplies no other loads. NEC 210-8, 210-52(c).
- c) Subservice panelboards supplying or intended to supply pool equipment shall be grounded by an insulated equipment grounding conductor installed with the feeders. NEC 680-25(d).
- d) All branch circuits supplying bedroom receptacle outlets shall be Arc-Fault Circuit Interrupter (AFCI) protected. NEC 210-12.
- e) All metal piping systems, metal parts of electrical equipment, and pump motors associated with the hydromassage tub shall be bonded together using a copper bonding jumper, insulated, covered, or bare, not smaller than No. 8 solid.
 Metal parts of listed equipment incorporating an approved system of double insulation and providing a means for grounding internal nonaccessible, noncurrent-carrying metal parts shall not be bonded. NEC 680-73.

Provide GFCI protection for receptacle outlets at the following locations: NEC 210-8, NEC 680:

- a) Bathrooms
- b) Garages
- c) Work Areas
- d) Storage
- e) Outdoors
- f) Crawl Spaces
- g) Unfinished Basements
- h) Kitchen Countertops
- i) Within 6 feet of any sink, basin, lavatory, or similar water receptor
- j) Hydromassage or Jetted Bathtubs. NEC 680-70
- k) Pools. NEC 680 A & B.
- l) Spas. NEC 680-42.

Include the following notes on the Floor Plans:

- a) Barbeque (BBQ) Unit:
 Provide a listed and approved barbeque unit installed in accordance with the listing and with the manufacturer's installation instructions. The unit shall conform to ansi z21.58-1993 and shall be approved by a nationally recognized testing agency.
- b) GAS LINES:
 1. Are not permitted under slabs.
 2. Are not permitted under structures.
 3. Shall conform to U.P.C. Chapter 12 for materials, installation, and testing.
- c.) RANGES AND COOKTOPS:
 Provide a listed and approved range and/or cooktop unit installed in accordance with the listing and with the manufacturer's installation instructions. VERIFY AND MAINTAIN REQUIRED HORIZONTAL AND VERTICAL CLEARANCES ABOVE THE FINISHED COUNTERTOP SURFACE BEFORE ORDERING OR INSTALLING CABINETS.

17. Provide an expansion tank at the water heater if a backflow preventer is required to be installed on the water line or at the meter. UPC Section 608.3.
18. Showers and tub-shower combinations shall be provided with individual control valves of the pressure balance or thermostatic mixing valve type. UPC Section 410.7.
19. Domestic dishwashing machines connected to a disposer shall have the discharge installed as high as possible, not lower than 2" above the floor rim of the sink. UPC 807.4.
20. Membrane penetrations in garage walls shall comply with UBC Section 709.7.

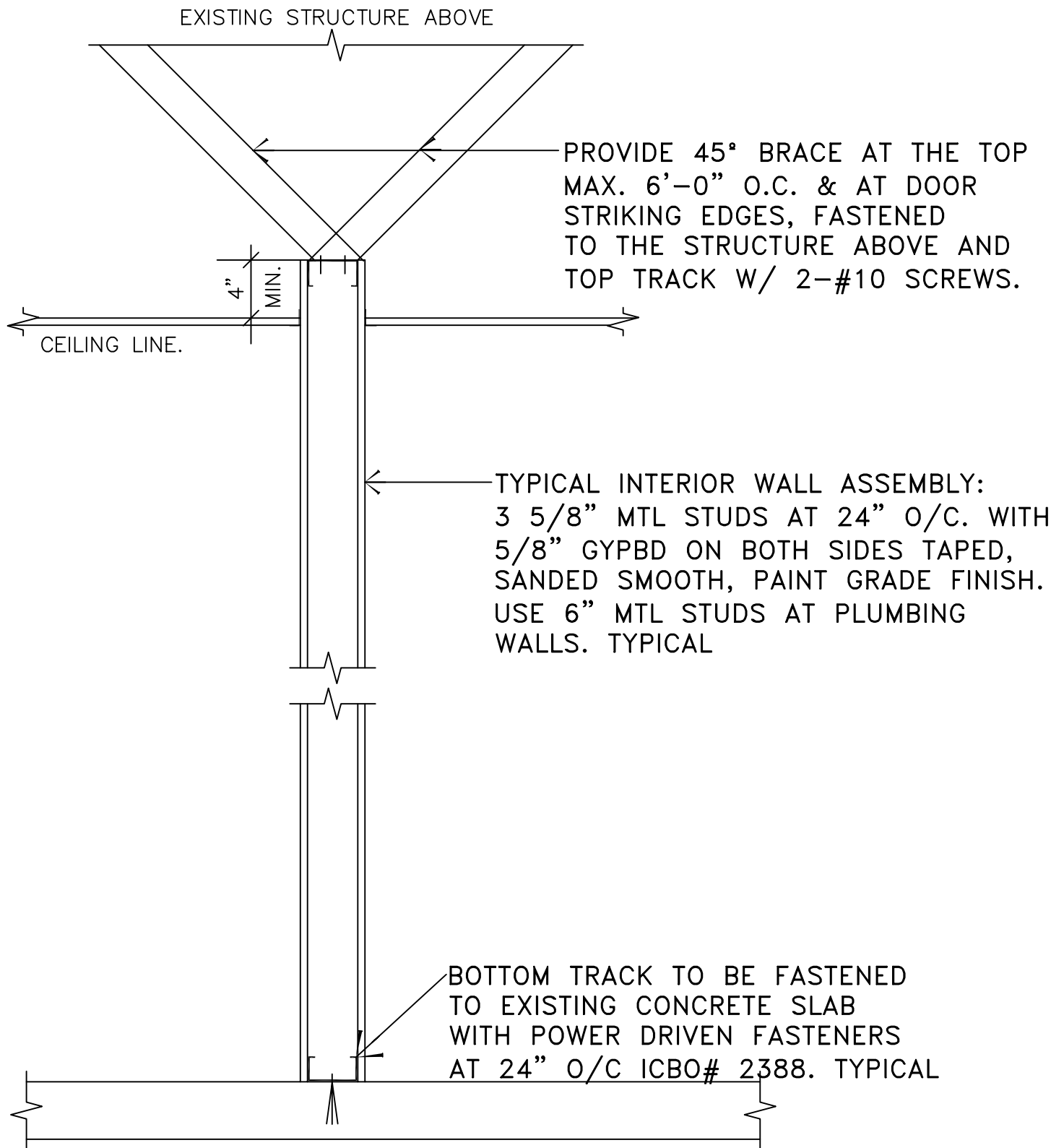
21. Registers, diffusers and grilles shall be mechanically fastened to rigid supports or structural members on at least two opposite sides in addition to being connected to the ductwork they serve. City of Scottsdale amendment to UMC Section 603
22. The clothes dryer shall be provided with a 4 inch diameter exhaust duct to the exterior and shall not exceed a total length of 14 feet, unless an engineered duct system is provided. UMC Sections 504.1 and 908.1. The duct shall terminate not less than 3 feet from a property line or from openings into a building. UMC Section 504.6.
23. Fixtures located in damp or wet locations shall be "listed" to be suitable for such location. NEC Article 410-4.
24. Provide GFCI protection for receptacles within 6' of all lavatories, sinks and basins. NEC210-8.
25. Provide GFCI protected receptacles at all exterior, bathroom and garage locations. NEC 210-8, 210-52.
26. Provide a wall mounted GFCI protected receptacle outlet within 36" of a bathroom or powder room lavatory. NEC 210-52(d).
27. All circuits supplying receptacle outlets in bedrooms shall be AFCI protected. NEC 210-12.
28. Receptacle outlets shall be installed so that no point along the floor line in any wall space is more than 6 feet, measured horizontally, from an outlet in that space, including any wall space 2 feet or more in width. NEC Article 210-52 (a).
29. Bathroom receptacle outlets shall be supplied by at least one 20-ampere branch circuit. Such circuits shall have no other outlets unless serving only one bathroom. NEC Article 210-52 (d).
30. Provide a separate 20 ampere branch circuit to the laundry. NEC Article 210-11(c), 210-52(f), 220-16(b).
31. Provide a minimum of two 20 amp small appliance branch circuits for the kitchen/dining/breakfast. NEC Article 210-(c)(1), 210-52(b)(1), 220-16(a).
32. The two or more 20-ampere small appliance branch circuits shall have no other outlets, except the receptacle installed solely for electric supply to an electrical clock in the kitchen/dining/breakfast areas or receptacles for supplemental equipment and lighting for gas-fired ranges, ovens, or counter-mounted units. NEC Article 210-52 (b)(2).

33. Receptacle outlets for ranges and clothes dryers shall be a 3-pole with ground type. Four-wire, grounding-type flexible cords will be required for connection of ranges and clothes dryers. The bonding jumper shall not be connected between the neutral terminal and the frame of the appliance. NEC Article 250-140.
34. Provide a concrete encased grounding electrode of not less than 20 feet of #4 bare copper (200 ampere service). NEC Article 250-50(c), 250-66.
35. Provide bonding to the water piping, gas and metal building systems. (minimum #4 for 200 amp service). NEC Article 250-50, 250-104.
36. All metal piping systems, metal parts of electrical equipment, and pump motors associated with the hydromassage tub shall be bonded together using a copper bonding jumper, insulated, covered, or bare, not smaller than No. 8 solid.
 Metal parts of listed equipment incorporating an approved system of double insulation and providing a means for grounding internal non-accessible, non-current-carrying metal parts shall not be bonded. NEC 680-73.



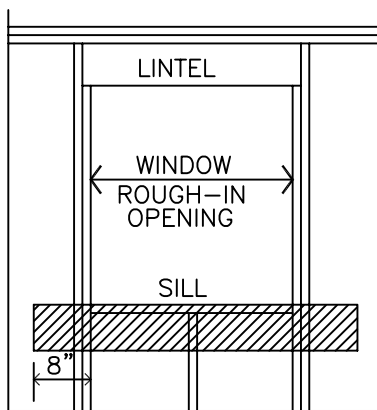
ISLAND VENT DETAIL

EXAMPLE



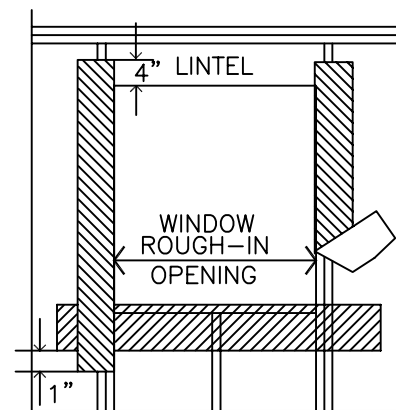
TYPICAL INTERIOR WALL ASSEMBLY

Step 1



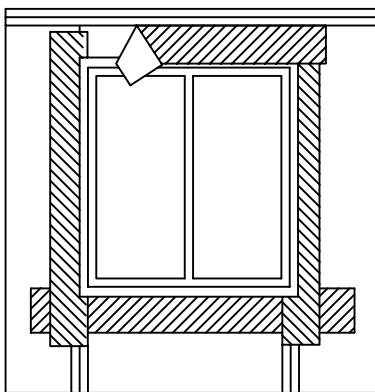
Attach sill strip with top edge level with rough sill; extend beyond edge of rough opening at least 8". Secure all building paper or similar approved flashing material with galvanized nails or power driven staples.

Step 2



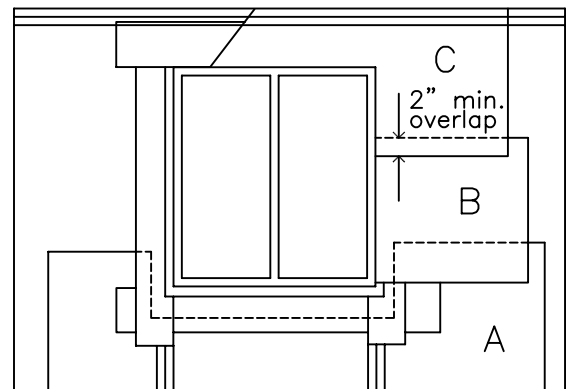
Attach jamb strips with side edge even with rough-jamb framing. Start strip 1" below lower edge of sill strip and extend 4" above lower edge of lintel.

Step 3



Install window into rough opening with sill and jamb flanges over previously installed flashing. Attach head flashing over the window flange.

Step 4



Commencing at the bottom(sole plate) of the wall, lay building paper under sill strip. Cut any excess building paper that may extend above the sill flange line on each side of opening (shown as dashed line). Do not cut building paper horizontally so the paper will lap over the jamb strips. Install successive lines of building paper (B,C,D etc) over jamb and head flanges, lapping each course.

WINDOW FLASHING DETAIL